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(54) Title: **NOVEL OX40R BINDING AGENTS**

(57) Abstract: The present invention discloses peptides isolated from the extracellular domain of OX40 Ligand (OX40L) capable of binding OX40 Receptor (OX40R) and inhibiting OX40R-OX40L interaction. Such peptides, fusion proteins comprising them, as well as peptides and other molecules designed on their sequences, can be used as OX40R binding agents competing with natural OX40L for blocking OX40R-mediated cell signaling in the prophylaxis and/or treatment of diseases related to activated T cells.